

### **SECTION 8 - GLOSSARY OF TERMS**

**ANSI**, American National Standards Institute.

**ANSI Standard**, A document published by ANSI that has been approved through the consensus process of public announcement and review. ANSI Standards are developed by committees accredited by ANSI (see ASC) and must be revisited by the developing committee within five years for updating.

**API**, American Petroleum Institute.

**Application Acknowledgment**, A transaction set that returns a response to a transaction set that has been received and processed in an application program. The Purchase Order Acknowledgment transaction set 855 is an example of an application acknowledgment, used to respond to the Purchase Order transaction set 850 presenting such things as whether the receiver can fulfill the order on time.

**Application Advice (824)**, A transaction set returned to the original sender to report the results of an application system's data content edits of the sender's transaction set.

**Area, Transaction Set**, Identifies a defined area within a transaction set containing segments. The areas may be referred to as Table 1, Table 2, Table 3 or Header, Detail and Summary.

**ASC X12**, Accredited Standards Committee X12. Its purpose is to develop uniform standards for electronic interchange of business documents. Membership is open to virtually all organizations and individual with a material interest in the standards. standards.

**AAR**, Association of American Railroads.

**ATA**, American Trucking Associations, Inc.

**Authentication**, A mechanism that allows the receiver of an electronic transmission to verify the sender of the integrity of the content of the transmission through the use of an electronic "key" or algorithm, which is shared by the trading partners. This is sometimes referred to as an electronic signature.

**BSR**, Bureau of Standards Review.

**CAP**, Capacity Assurance Plan. A plan required by CERCLA, prepared by states using data from UDMR shipping documents and/or Biennial Reports.

**CEC**, Commission of the European Communities.

**CEN**, European Committee for Standardization.

**CERCLA**, Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

**CFR**, The Code of Federal Regulations contains the detailed regulations, written by Federal Agencies, to implement the provisions of laws passed by Congress. Regulations in the CFR are equivalent to Federal law.

**CIDX**, Chemical Industry Data Exchange.

**CMEA**, Council for Mutual Economic Assistance.

**Compliance Checking**, A checking process that is used to ensure that a transmission complies with ASC X12 syntax rules.

**Component Data Element**, An data element used as a sub-element in a Composite Data Structure.

**Component Data Element Separator**, Sometimes referred to as a sub-element separator. A unique character that precedes each Component Data Element in a Composite Data Structure. It is specified by the sender in the Interchange Control Header (ISA). The separator has a range of influence from this header to the next Interchange Control Trailer (IEA) segment. The sub-element must be different from the data element separator and segment terminator and once specified in the ISA segment must not appear in a data element value with the exception of its possible appearance in Data Element #785, Binary Data. Within diagrams, the colon (:) is used to represent the separator character. Within diagrams, the colon (:) is used to represent the separator character.

**Composite Data Structure**, Structure that consists of two or more logically related component data elements in a defined sequence and delimited by a Component Element Separator.

**Condition Designator**, An indicator assigned to each data element in a segment and defines how it is to be used in the segment. Data elements may be designated as Mandatory (M), Optional (O) or Relational (X). Refer to the ASC X12 Standards, X Segment Directory, Introduction.

**Control Segment**, A control segment has the same structure as a data segment but is used for transferring control information for grouping data segments. Control Segments are Loop Control Segments (L/LE), Transaction Set Control Segments (ST/SE), and Functional Group Control Segments (GS/GE), defined in X12.6 and Interchange Control Segments (ISA/IEA,TA1) defined in X12.5.

**Control Validation**, Confirmation that information within the control segments is correct.

**Conventions**, Common practices and/or interpretations of the use of the ASC X12 standards, complying with the standards, as agreed upon by two or more trading partners. Conventions define what is included in a specific implementation of an ASC X12 standard.

**Data Element**, The smallest unit of information in the X12. Data elements are defined in the Data Element Dictionary, X12.3. Each data element is identified by a reference number.

**Data Element Dictionary**, Source document for Data Element specifications. Its official name is X12.3 Data Element Dictionary. The dictionary specifies the name, description, and minimum/maximum length for each data element. For ID-type or code type data elements, the dictionary lists all code values and their definitions or indicates in an appendix where the valid code list can be obtained.

**Data Element Length**, Number of character positions available to represent the data element value. A data element may be of variable length with range from minimum to maximum, or it may be of fixed length in which the minimum is equal to the maximum.

**Data Element Reference Number**, Reference number assigned to each data element as a unique identifier. Numbers prefixed with a "C" or an "S" indicate a Composite Data Element. Lack of a prefix indicates indicate a Simple Data Element.

**Data Element Separator**, A unique character preceding each data element that is used to delimit data elements within a segment. It is specified by the sender in the Interchange Control Header (ISA). The separator has a range of influence from this header to the next Interchange Control Trailer (IEA) segment. The data element separator must be different from the component or sub-element data separator and segment terminator and once specified in the ISA segment must not appear in a data element value with the exception of its possible appearance in Data Element #785, Binary Data. Within diagrams, the asterisk (\*) is used to represent the separator character. See "Delimiters".

**Data Element Type**, An identification which describes the format of the data in the element. A data element may be one of eight types: Numeric (N), Decimal (R), Identifier (ID), String (AN), Date (DT), Time (TM), Binary (B), or Fixed Length String (FS). Refer to X12.3 Data Element Dictionary, Introduction.

**Delimiters**, Delimiters are bit configurations that are used as data element separators, component or sub-element separators and segment terminators. The design of X12 is based on the concept of variable lengths. Delimiters are necessary to identify the start of data elements and sub-elements and to identify the end of segments. They are specified by the sender in the Interchange Control Header (ISA). They have a range of influence from this header to the next Interchange Control Trailer (IEA) segment. Delimiters are agreed upon by the Trading Partners. The instance of the terminator must be different from the instance of the data element separator which must be different from the component (sub-element) element separator. Once specified in the ISA segment they must not appear in a data element value with the exception of its possible appearance in Data Element #785, Binary Data.

**DISA**, Data Interchange Standards Association. A not-for-profit organization which serves as the Secretariat for ASC X12 and the Pan American EDIFACT Board(PAEB). It is accredited by ANSI to administer the U.S. Technical Advisory Group on matters pertaining to EDIFACT syntax before the International Organization for Standardization's(ISO's) Technical Committee 154.

**Direct Transmission**, The exchange of data from the computer of the sending party directly to the computer of the receiving party.

**DOT**, Department of Transportation.

**Draft Standard for Trial Use (DSTU)**, A document approved by the full ASC X12 committee following membership consensus and subsequent resolution of negative votes and approved for publication by the Procedures Review Board. DSTU's must be submitted to ANSI periodically for approval as National Standards. See ANSI Standard.

**EBCDIC**, Extended binary-coded-decimal interchange code.

**ECE**, European Community of Economics (UN/ECE.)

**EDI**, The abbreviation for Electronic Data Interchange, which is commonly defined as "the computer-to-computer exchange of business information in a standard format." An EDI transmission is a highly structured message intended for automated processing by a computer. All references to EDI under U.S. EPA programs refers to the utilization of ASC X12 standards.

**EDICC**, Electronic Data Interchange Council of Canada.

**EDIFACT**, Electronic Data Interchange for Administration, Commerce, and Transport. (UN/EDIFACT.)

**EDIFACT Board**, Advisory and support team for a number of the UN/EDIFACT Rapporteur.

**EDI Translation**, The conversion of application data to and from the X12 standard format.

**EDI Translator**, Computer software used to perform the conversion of application data to and from the X12 standard format.

**EDX**, Electrical Data Exchange.

**EIDX**, Electronics Industry Data Exchange.

**Electronic Data Interchange (EDI)**, The computer application to computer application exchange of business information in a standard format. An EDI transmission is a highly structured message intended for automated processing by a computer. All references to EDI under U.S. EPA programs refers to the utilization of ASC X12 standards.

**Electronic Envelope,** Electronic package that contains a set(s) of documents sent from one sender to one receiver. See Interchange Control Segments.

**Electronic Mailbox,** A repository where an EDI transmission is stored for pickup or delivery. Mail boxes may be within a third-party service provider's system or in an individual trading partner's domain.

**Encryption,** A process of transforming clear text (data in its original, uncoded form) into ciphertext (encrypted output of a cryptographic algorithm) for security or privacy.

**EPA,** The Environmental Protection Agency. Also called USEPA for United States Environmental Protection Agency. Established in 1970 by Presidential executive order, it brings together parts of various government agencies involved with the control of pollution. Note that some State environmental authorities may be called EPA also, as in Illinois EPA.

**ESDX,** Environmental and Safety Data Exchange.

**FIPS PUB 161,** Federal Information Processing Standard, Publication 161.

**Functional Acknowledgment,** A transaction set (997) transmitted by the receiver of an EDI transmission to the sender, indicating receipt and syntactical acceptability of data transmitted according to the ASC X12 standards. The functional acknowledgment allows the receiving party to report back to the sending party problems encountered by the syntax analyzer as the data is interpreted. It is not intended to serve as an acknowledgment of data content.

**Functional Group,** A group of one or more transaction sets enclosed by a Functional Group Header (GS) segment and a Functional Group Trailer (GE) segment. Each instance of a functional group applies to a specific business function defined by the specific application to which it applies.

**Functional Group Envelope,** The envelope starting with a GS (Functional Group Header) Element and terminated with a GE (Functional Group Trailer) Element.

**GOSIP,** Government Operations Systems Information Protocol

**Guideline,** A document prepared by an EDI implementor that defines the use of the ASC X12 standards in the implementor's environment.

**Hexadecimal,** Base 16 notation commonly used to represent binary values.

**ICMS,** Integrated Contract Management System. An automated procurement and contract management system integrated with a financial management system.

**Implementation Guideline,** A document prepared by an industry group, association, institute, government body or individual trading partner that defines how the ASC X12 standards are used by that industry.

**Industry Conventions,** A document prepared by an industry group, association, institute, etc. that defines how the ASC X12 standards are used by that industry.

**Interchange,** A transfer of data between trading partners.

**Interchange Control Envelope,** The outer envelope that holds multiple functional group envelopes in an ASC X12 transmission.

**Interchange Control Segments,** Segments that identify the boundaries of the ASC X12 formats in a transmission. Interchange Control Header (ISA) and Interchange Control Trailer (IEA) segments identify a unique interchange being sent from one sender to one receiver.

**Interchange Control Structure,** The Interchange Control Header (ISA) and Interchange Control Trailer (IEA) segments envelope one or more functional groups or interchange related control segments and perform the following functions: 1) defines the data element separators and the data segment terminators, 2) identifies the sender and receiver, 3) provides control information for the interchange, and 4) allows for authorization and security information. (X12.5).

**Level,** A term used to identify hierarchical positions in an ASC X12 design. The levels used from highest to lowest are Communications, EDI Interchange, Functional Group, Transaction Set, Heading Area, Summary Area and Detail Area. Reference ASC X12 publication DSTU X12.59 Implementation of EDI Structures - Semantic Impact.

**Loop,** A group of segments related only by design of the transaction set. Use of any segment within a loop requires the use of the first or parent segment of the loop.

**Mandatory (M),** A data element/segment requirement designator that indicates that the presence of a specified data element is required.

**Mapping,** The process of identifying the relationship between the data elements in the standard transaction set and the data elements in the application..

**Max Use,** The maximum number of times a segment can be used at the location in a transaction set.

**Message,** Entire data stream including the outer envelope.

**NBFA,** National Business Forms Association.

**NEIC,** National Environmental Investigation Center.

**OPPE**, Office of Policy, Planning, and Evaluation is an organization within the U.S. EPA.

**Optional (O)**, A data element/segment requirement designator that indicates that the presence of a specified data element/segment is at the option of the sending party, which can be based on the mutual agreement of the interchange parties.

**PIDX**, Petroleum Industry Data Exchange.

**Proprietary Format**, A data format specific to a company, industry, or other limited group. Proprietary formats may not comply with the ASC X12 series of standards.

**Qualifier**, A data element that identifies or defines a related element. Qualifier elements are ID Type Elements. The qualifier is a code taken from a list of approved codes.

**Rapporteur**, The official UN/EDIFACT title given to the individual who is responsible within a regional UN/EDIFACT Board for the coordination of Message Development, Technical Assessment, Maintenance, Promotion and Documentation and Special Projects.

**RCRA**, The Resource Conservation and Recovery Act is the Federal statute that regulates the generation, treatment, storage, disposal or recycling of solid and hazardous waste.

**Repeating Segment**, A segment that may be used more than once at a given location in a transaction set. See Max Use.

**SARA**, The Superfund Amendments and Reauthorization Act of 1986.

**Security**, System screening that denies access to unauthorized users and protects data from unauthorized uses.

**Segment**, Variable length set of logically related data elements in a defined sequence, a unique segment identifier (which is not a data element), one or more data elements, each preceded by a data element separator, and a segment terminator. Refer to X Segment Directory.

**Segment Directory (X)**, The standard that provides the definitions and specifications of the segments used in the construction of transaction sets developed by ASC X12. The directory lists each segment by name, purpose, identifier, the contained data elements in the specified order, and the requirement designator for each data element.

**Segment Identifier**, A unique identifier for a segment composed of a combination of two or three letters or digits. The segment identifier occupies the first character positions of the segment. The segment identifier is not a data element. The segment identifier in UN/EDIFACT is a component data element — part of a composite data element consisting of a segment identifier and an explicit looping designator.

**Segment Terminator,** A unique character appearing at the end of a segment to indicate the termination of the segment. It is specified by the sender in the Interchange Control Header (ISA). The segment terminator has a range of influence from this header to the next Interchange Control Trailer (IEA) segment. The segment terminator must be different from the data element and sub-element separators and once specified in the ISA segment must not appear in a data element value with the exception of its possible appearance in Data Element #785, Binary Data. Within diagrams, the notation "N/L" is used to represent the segment terminator.

**Segment Directory (X),** Provides the purposes and formats of the segments used in the construction of transaction sets. The directory lists each segment by name, purpose, identifier, the contained data elements in the specified order, and the requirement designator for each data element.

**Segment Identifier,** A unique identifier for a segment composed of a combination of two or three uppercase letters and digits. The segment identifier occupies the first character positions of the segment. The segment identifier is not a data element. The segment identifier in UN/EDIFACT ISA component data element—part of a composite data element consisting of a segment identifier and an explicit looping designator.

**Standards,** Standards are the technical documentation approved by ASC X12, including Transaction Sets, Segments, Data Elements, Codes and Interchange Control Structures. Standards provide the structure for ASC X12.

**Sub Element Separator,** Sometimes referred to as a Component Data Element Separator. A unique character that precedes each Component Data Element in a Composite Data Structure. It is specified by the sender in the Interchange Control Header (ISA). The separator has a range of influence from this header to the next Interchange Control Trailer (IEA) segment. The sub-element must be different from the data element separator and segment terminator and once specified in the ISA segment must not appear in a data element value with the exception of its possible appearance in Data Element #785, Binary Data. Within diagrams, the colon (:) is used to represent the separator character.

**Syntax,** The grammar or rules that define the structure of the EDI standards (i.e., the use of loops, qualifier, etc.). Syntax rules are published in ANSI X12.6.

**Trading Partner,** The sending and/or receiving party involved in the exchange of electronic data interchange transmissions.

**Transaction Set,** The transaction set unambiguously defines, in the standard syntax, information of business or strategic significance and consists of a transaction set header segment, one or more data segments in a specified order, and a transaction set trailer segment.

**Transaction Set ID,** An identifier that uniquely identifies the transaction set. This identifier is the first data element of the transaction set header segment.



**Translation,** The act of accepting documents in other than X12 standard format and converting them to the X12 standard format.

**Transmission Control,** Defines how information is transmitted across communications lines and includes routing and recommendations.

**TSD Facility,** A site for Treatment, Storage, and Disposal of hazardous waste.

**UCC,** Uniform Code Council.

**UCS,** Uniform Communication Standard.

**UHWM,** The shipping document that pertains to hazardous waste and is duly signed by the generator is called a Uniform Hazardous Waste Manifest, as set out in EPA Form 8700-22.

**UNCID,** Uniform Rules of Conduct For Interchange of Trade Data by Teletransmission.

**VAN,** Value Added Network. Third-party service organizations.

**Version/Release,** Identifies the publication of the standard being used for the generation or the interpretation of data in the X12 standard format. May be found in the Functional Group Header Segment (GS) and in the Interchange Control Header Segment (ISA). (E.g., Version 003040 means Version 3 Release 4.) See Control Segment.

**VICS Committee,** Voluntary Interindustry Communications Standards for Electronic Data Interchange.

**WINS,** Warehouse Industry National Standards guidelines.

**X12,** The ANSI committee responsible for the development and maintenance of standards for Electronic Data Interchange (EDI).

**X12.5,** Interchange Control Structures. This standard defines the control structures, the interchange envelope of a header (ISA) and trailer (IEA) for the electronic interchange through a data transmission, and it provides a structure to acknowledge the receipt and processing of this envelope.

**X12.6,** Application Control Structure. This standard defines the structure of business transactions for computer-to-computer interchange.

**THIS PAGE LEFT INTENTIONALLY BLANK**